State of California Department of Water Resources
The Resources Agency

## OFFICE MEMO

TO: Ruth Lambert, DWR Fred Bachman, DWR

FROM: Michael Norris
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DATE: 4-6-93

SUBJECT: Update of Figure 8 on page 14 of the August of 1987 Sacramento-San Joaquin Delta Atlas

As per a memo sent to Mary Johannis on March 26, 1993, the Delta Atlas is being revised by the Delta Planning Branch. It appears that a memo I sent to Ruth Lambert on 12-20-91 was never incorporated into the revision. I prepared a "revised Figure 8" that showed all the additional levees that are now NFIP certified for the 100-year flood. Ruth Lambert subsequently informed me that I had missed the Walnut Grove area (Reclamation District In the time that has passed, Bishop Tract has also certified their levees to meet FEMA standards and the area was removed from the floodplain through the Letter of Map Revision (LOMR) process. Enclosed is a further update to Figure 8. Please ensure that this one makes it to the final printing of the revised Delta Atlas. Below are listed the additional levees from what was originally portrayed on Figure 8 that are now certified by the National Flood Insurance Program (NFIP) to meet the FEMA criteria.

<u>Area</u> Brannan Is. Sargent Barnhart	Sacramento Co San Joaquin Co		<u>LOMR</u> none 2-21-90
Quail Lake RD 1614	Stockton San Joaquin Co	15	2-21-90 8-14-91
RD 1614 RD 1614	Stockton Co	15	8-14-91
RD 828	Stockton	15,20	8-14-91
Rough and Ready Is. RD 17	Stockton San Joaquin Co		none
RD 2089 Del Rio	San Joaquin Co San Joaquin Co		2-9-90 none 8-7-90
RD 554 (Walnut Grove) RD 2042 (Bishop Tract)	Sacramento Co	420,440,560,580 260,270,280,290	9-30-88 none 12-28-92

In addition, I wish to comment on the enclosed figure entitled National Flood Insurance Program Approved Levees. I do not feel that the descriptive paragraph conveys the correct information to the reader. The paragraph should convey some information on what is required for a levee to meet the NFIP requirements. I suggest you revise the paragraph to read: "Some levee systems within the delta are certified to meet the minimum requirements for

providing 100-year flood protection. These levee systems are shown on Figure 8. The requirements for NFIP certification are set forth in the federal regulations in 44 CFR 65.10. Among these requirements are three feet of freeboard (increasing to four feet at bridge crossings) and evidence that an adequate design and operation and maintenance system is in place and engineering analyses of such things as embankment protection, foundation stability, settlement, and interior drainage. After all requirements are met, a submittal of data and a request for certification must be made to the Federal Emergency Management Agency (FEMA) by a registered civil engineer. In lieu of meeting all the structural requirements, FEMA will accept another federal agency's certification of a levee system if that agency has responsibility for levee design. These agencies are typically the Soil Conservation Service and the U.S. Army Corps of Engineers."

Lastly, I noticed that the photos on the figure entitled <u>National Flood Insurance Program Approved Levees</u> are for levee projects near the City of Sacramento. Figure 8 only goes as far north as the community of Hood along the Sacramento River. I suggest you show some photos of levee systems on Figure 8 such as Discovery Bay, Sargent Barnhart, and Bishop Tract.

figure8.mn